

Complete Summary

GUIDELINE TITLE

Guidelines for the management of basal cell carcinoma.

BIBLIOGRAPHIC SOURCE(S)

Telfer NR, Colver GB, Morton CA, British Association of Dermatologists. Guidelines for the management of basal cell carcinoma. Br J Dermatol 2008 Jul;159(1):35-48. [181 references] [PubMed](#)

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

Basal cell carcinoma

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Risk Assessment
Treatment

CLINICAL SPECIALTY

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To aid selection of the most appropriate treatment for individual patients

TARGET POPULATION

Patients with basal cell carcinoma

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation/Prognosis

1. Diagnostic accuracy
 - Good lighting and magnification, dermatoscope
2. Biopsy
3. Exfoliative cytology
4. Imaging techniques (computed tomography, magnetic resonance imaging)
5. Risk assessment for prognostic factors

Management/Treatment

1. Surgical techniques
 - Excision with predetermined margins, including primary basal cell carcinoma (BCC), incomplete excised BCC, and recurrent BCC
 - Mohs micrographic surgery
2. Destructive techniques: Surgical
 - Curettage and cautery
 - Cryosurgery
 - Carbon dioxide laser
3. Destructive techniques: nonsurgical
 - Topical immunotherapy with imiquimod
 - Photodynamic therapy
 - Radiotherapy
4. Follow-up

MAJOR OUTCOMES CONSIDERED

- Incidence of basal cell carcinoma (BCC)
- Recurrence rate
- Cure rate
- Treatment side effects
- Cost of treatment

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Quality of Evidence

I Evidence obtained from at least one properly designed, randomized controlled trial.

II-i Evidence obtained from well-designed controlled trials without randomization.

II-ii Evidence obtained from well-designed cohort or case-control analytical studies, preferably from more than one centre or research group.

II-iii Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.

III Opinions of respected authorities based on clinical experience, descriptive studies or reports of expert committees.

IV Evidence inadequate owing to problems of methodology (e.g., sample size, or length or comprehensiveness of follow-up or conflicts of evidence).

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Strength of Recommendations

- A. There is good evidence to support the use of the procedure
- B. There is fair evidence to support the use of the procedure.
- C. There is poor evidence to support the use of the procedure.
- D. There is fair evidence to support the rejection of the use of the procedure.
- E. There is good evidence to support the rejection of the use of the procedure.

COST ANALYSIS

Several studies have looked at the comparative cost of Mohs micrographic surgery (MMS) which (to produce tumour-free margins) has a similar cost to traditional excision⁸ but is less expensive than excision using intraoperative frozen section control. A study from the Netherlands found MMS to be more expensive than traditional surgery; however, as MMS is likely to produce extremely high cure rates, it remains cost-effective.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Guidelines were submitted in draft form to membership of the British Association of Dermatologists (BAD) for comments.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions for the quality of evidence (I, II-i, II-ii, II-iii, III, IV) and strength of recommendations (A-E) are presented at the end of the "Major Recommendations" field.

Diagnosis and Investigation

Dermatologists can make a confident clinical diagnosis of basal cell carcinoma (BCC) in most cases. Diagnostic accuracy is enhanced by good lighting and magnification and the dermatoscope may be helpful in some cases. Biopsy is

indicated when clinical doubt exists or when patients are being referred for a subspecialty opinion, when the histological subtype of BCC may influence treatment selection and prognosis (See Table 1 in the original guideline document). The use of exfoliative cytology has been described. Imaging techniques such as computed tomography or magnetic resonance imaging scanning are indicated in cases where bony involvement is suspected or where the tumour may have invaded major nerves, the orbit or the parotid gland.

'Low-risk' and 'High-risk' Tumours, Patient Factors and Treatment Selection

The likelihood of curing an individual BCC strongly correlates with a number of definable prognostic factors (see Table 1 in the original guideline document). These factors should strongly influence both treatment selection and the prognostic advice given to patients. The presence or absence of these prognostic factors allows clinicians to assign individual lesions as being at low or high risk of recurrence following treatment.

Surgical Techniques

Excision with Predetermined Margins

Primary Basal Cell Carcinoma

Evidence level: Surgical excision is a good treatment for primary BCC. (*Strength of recommendation A, quality of evidence I*).

Incompletely Excised Basal Cell Carcinoma

Evidence level: Tumours which have been incompletely excised, especially (i) high-risk lesions; and (ii) lesions incompletely excised at the deep margin, are at high risk of recurrence. (*Strength of recommendation A, quality of evidence II-i*).

Recurrent Basal Cell Carcinoma

Evidence level: Recurrent tumours, especially on the face, are at high risk of further recurrence following surgical excision even with wide surgical margins. (*Strength of recommendation A, quality of evidence II-ii*).

Mohs Micrographic Surgery

Evidence levels: Mohs micrographic surgery is a good treatment for high-risk primary BCC. (*Strength of recommendation A, quality of evidence I*).

Mohs micrographic surgery is a good treatment for high-risk recurrent BCC. (*Strength of recommendation A, quality of evidence I*).

Destructive Techniques: Surgical

Destructive surgical and nonsurgical techniques are best used for low-risk disease. Unless a confident clinical diagnosis and assessment has been made, a

preoperative biopsy is indicated to confirm the diagnosis and to determine the histological subtype. This advice is especially important for facial lesions.

Curettage and Cautery

Evidence levels: Curettage and cautery is a good treatment for low-risk BCC. *(Strength of recommendation A, quality of evidence II-iii).*

Curettage and cautery is a poor treatment for high-risk BCC. *(Strength of recommendation D, quality of evidence II-iii).*

Curettage and cautery is a poor treatment for recurrent BCC. *(Strength of recommendation D, quality of evidence II-ii).*

Cryosurgery

Evidence level: Cryosurgery is a good treatment for low-risk BCC. *(Strength of recommendation A, quality of evidence II-ii).*

Carbon Dioxide Laser

Evidence level: Carbon dioxide laser ablation may be effective in the treatment of low-risk BCC. *(Strength of recommendation C, quality of evidence III).*

Destructive Techniques: Nonsurgical

Topical Immunotherapy with Imiquimod

Evidence levels: Topical imiquimod appears effective in the treatment of primary small superficial BCC. *(Strength of recommendation A, quality of evidence I).*

Topical imiquimod may possibly have a role in the treatment of primary nodular BCC. *(Strength of recommendation C, quality of evidence I).*

Photodynamic Therapy

Evidence levels: Photodynamic therapy is a good treatment for primary superficial BCC. *(Strength of recommendation A, quality of evidence I).*

Photodynamic therapy is a reasonable treatment for primary low-risk nodular BCC. *(Strength of recommendation B, quality of evidence I).*

Radiotherapy

Evidence levels: Radiotherapy is a good treatment for primary BCC. *(Strength of recommendation A, quality of evidence I).*

Radiotherapy is a good treatment for recurrent (but not radiorecurrent) BCC. *(Strength of recommendation A, quality of evidence I).*

Definitions:**Quality of Evidence**

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Strength of Recommendations

- A. There is good evidence to support the use of the procedure
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- D. There is fair evidence to support the rejection of the use of the procedure.
- E. There is good evidence to support the rejection of the use of the procedure.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS**TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of supporting evidence is identified and graded for selected recommendations (see "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**POTENTIAL BENEFITS**

Appropriate diagnosis and management of basal cell carcinoma

POTENTIAL HARMS

- Other than tumour recurrence, adverse results of cryosurgery to eyelid and periocular basal cell carcinoma (BCC) include conjunctival hypertrophy and ectropion which may require corrective surgery. Pain and discomfort during and after treatment may also occur.
- Inflammatory reactions are associated with the use of imiquimod.
- Topical photodynamic therapy (PDT) can be a time-consuming procedure, especially if performed on multiple occasions. Pain during the illumination phase is significant for some patients and ranges from a stinging or burning sensation to occasionally severe discomfort. A number of measures can reduce this pain, including the use of fans, directed cool air, simple analgesia or local anaesthesia. Following PDT the area tends to swell and then form a crust which takes a few weeks to separate.
- Radiotherapy is associated with radionecrosis.

CONTRAINDICATIONS

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- Curettage and cautery of high-risk facial lesions is associated with a high risk of tumour recurrence and is generally contraindicated.
- Radiotherapy (RT) is contraindicated in the re-treatment of basal cell carcinoma (BCC) that has recurred following previous RT. RT may promote the growth of new BCC in patients with basal cell nevus (Gorlin's) syndrome (BCNS), and consequently should either be avoided or used with extreme caution in this patient group.

QUALIFYING STATEMENTS

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These guidelines have been prepared for dermatologists on behalf of the British Association of Dermatologists and are based on the best data available at the time the report was prepared. Caution should be exercised when interpreting the data where there is a limited evidence base. The results of future studies may require alteration of the conclusions or recommendations in this report. It may be necessary to depart from the guidelines in the interests of specific patients and special circumstances. Just as adherence to guidelines may not constitute defence against a claim of negligence, so deviation from them should not necessarily be deemed negligent.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Patient Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2008 Jul

GUIDELINE DEVELOPER(S)

British Association of Dermatologists - Medical Specialty Society

SOURCE(S) OF FUNDING

British Association of Dermatologists

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

C.A.M. has received honoraria for speaking and has organized educational events as well as conducted research during the past 5 years from/for Galderma. He has also received travel support from 3M Pharmaceuticals.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [British Association of Dermatologists Web site](#).

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

The following is available:

- Basal cell carcinoma. Patient information leaflet. London (England): British Association of Dermatologists; 2008 Jul. 4 p. Available from the [British Association of Dermatologists Web site](#).

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